

CLAIMS

What is claimed is:

1. A method for handling attributes in a document management system comprising the steps of:
 3. (a) defining at least one child index class, the at least one child index contains at least one additional real attribute; and
 5. (b) defining at least one corresponding parent index class, the at least one corresponding parent index class contains the at least one additional real attribute as a virtual attribute.
1. 2. The method of claim 1 which includes the step of (c), searching for the virtual attribute.
1. 3. The method of claim 2, wherein the searching step (c) further comprises the steps of:
 3. (c1) searching the at least one child index class for a real attribute related to the virtual attribute;
 5. (c2) obtaining the corresponding parent index class for each search hit in the at least one child index class;
 7. (c3) building a list of the obtained parent index classes; and
 8. (c4) returning the list of parent index classes with the virtual attribute.
1. 4. A method for handling attributes in a document management system

2 comprising the steps of:

3 (a) defining a document index class having a plurality of attributes; and
4 (b) defining a folder index class having one attribute.

1 5. The method of claim 4 which includes the step of (c) presenting the plurality
2 of attributes of the document class based upon step (b).

1 6. The method of claim 3, wherein the presenting step (c) further comprises the
2 steps of:

3 (c1) obtaining all parent folders corresponding to the folder index class;
4 (c2) obtaining an attribute and appending the attribute to a list for each obtained
5 folder; and
6 (c3) obtaining single-valued attributes of the document and returning the single-
7 valued attributes to the list.

1 7. A document management system comprising:

2 a document management interface, the document management interface including a
3 dynamic document description for definition of virtual and/or extended attributes and a first
4 search engine; and

5 a content management system coupled to the document management interface, the
6 content management system including a static document description and a second search
7 engine.

1 8. The system of claim 7, wherein the document management interface also
2 translates translating a search request into a number of document management system
3 requests that can be utilized by the content management system.

1 9. The system of claim 7 in which the document management interface also
2 defines at least one child index class, the at least one child index contains at least one
3 additional real attribute, and defines at least one corresponding parent index class, the at
4 least one corresponding parent index class contains the at least one additional real attribute
5 as a virtual attribute.

1 10. The system of claim 9 which the document management interface also
2 searches for the virtual attribute.

1 11. The system of claim 10, wherein the document management interface
2 searches the at least one child index class for a real attribute related to the virtual attribute,
3 obtains the corresponding parent index class for each search hit in the at least one child
4 index class, builds a list of the obtained parent index classes, and returns the list of parent
5 index classes with the virtual attribute.

1 12. The system of claim 7 in which the document management interface
2 also defines a document index class having a plurality of attributes, and defines a
3 folder index class having one attribute.

1 13. The system of claim 12 in which the document management interface also
2 presents the plurality of attributes of the document class based upon the folder index class
3 defining means.

1 14. The system of claim 13, wherein the document management interface
2 obtains all parent folders corresponding to the folder index class obtains an attribute
3 and appending the attribute to a list for each obtained folder; and obtains single-
4 valued attributes of the document and returning the single-valued attributes to the
5 list.

1 15. A computer readable medium containing program instructions for handling
2 attributes in a document management system, the program instructions for:
3 (a) defining at least one child index class, the at least one child index contains at
4 least one additional real attribute; and
5 (b) defining at least one corresponding parent index class, the at least one
6 corresponding parent index class contains the at least one additional real attribute as a virtual
7 attribute.

1 16. The computer readable medium of claim 15 which includes program
2 instructions for the virtual attribute.

1 17. The computer readable medium of claim 16, wherein the searching step (c)
2 further comprises the steps of:

(c1) searching the at least one child index class for a real attribute related to the virtual attribute;

(c2) obtaining the corresponding parent index class for each search hit in the at least one child index class;

(c3) building a list of the obtained parent index classes; and

(c4) returning the list of parent index classes with the virtual attribute.

18. A computer readable medium containing program instructions for handling attributes in a document management, the program instructions for:

- (a) defining a document index class having a plurality of attributes; and
- (b) defining a folder index class having one attribute.

19. The computer readable medium of claim 18 which includes program instructions for presenting the plurality of attributes of the document class based upon step (b)

20. The computer readable medium of claim 19, wherein the presenting step (c) further comprises the steps of:

(c1) obtaining all parent folders corresponding to the folder index class:

(c2) obtaining an attribute and appending the attribute to a list for each obtained folder; and

(c3) obtaining single-valued attributes of the document and returning the single-valued attributes to the list